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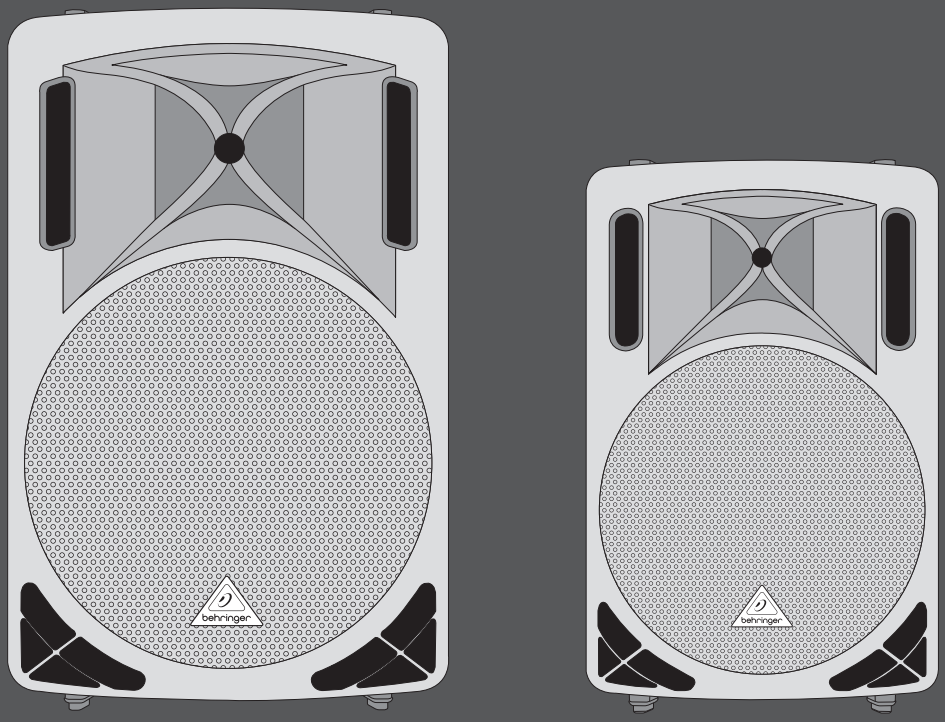

User Manual

EUROLIVE
B215XL/B215XL-WH
B212XL/B212XL-WH

1000/800-Watt 2-Way PA Speaker System with 15"/12" Woofer and 1.75" Titanium Compression Driver

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Thank you

Thank you very much for expressing your confidence in BEHRINGER products by purchasing the EUROLIVE B212XL/B215XL. This extremely compact loudspeaker has been designed specifically for those applications in which space is a problem. The compact dimensions and the low weight as well as the option to mount the loudspeaker on a wall give this product maximum flexibility. The EUROLIVE B212XL/B215XL is equipped with both ¼" TS and pro-level speaker connectors, so that you can expand your set-up flexibly at any time. All of these features make this loudspeaker a high-quality and highly reliable companion on the road.

EN Important Safety Instructions

CAUTION
RISK OF ELECTRIC SHOCK!
DO NOT OPEN!
ATTENTION
RISQUE DE CHOC ELECTRIQUE!
NE PAS OUVRIR!

Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock. Use only high-quality commercially-available speaker cables with ¼" TS plugs pre-installed. All other installation or modification should be performed only by qualified personnel.

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

Caution
To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside. Refer servicing to qualified personnel.

Caution
To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Caution
These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Use only attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

Legal Disclaimer

Technical specifications and appearance are subject to change without notice. The information contained herein is correct at the time of printing. All trademarks are the property of their respective owners. MUSIC Group accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph or statement contained herein. Colors and specifications may vary slightly from product. BEHRINGER products are sold through authorized dealers only. Distributors and dealers are not agents of MUSIC Group and have absolutely no authority to bind MUSIC Group by any express or implied undertaking or representation. This manual is copyrighted. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording of any kind, for any purpose, without the express written permission of MUSIC Group IP Ltd.

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Trident Chambers, Wickhams Cay, P.O. Box 146,
Road Town, Tortola, British Virgin Islands

Limited Warranty

§ 1 Warranty

1 This limited warranty is valid only if you purchased the product from a BEHRINGER authorized dealer in the country of purchase. A list of authorized dealers can be found on BEHRINGER's website behringer.com under "Where to Buy", or you can contact the BEHRINGER office closest to you.

2 MUSIC Group* warrants the mechanical and electronic components of this product to be free of defects in material and workmanship if used under normal operating conditions for a period of one (1) year from the original date of purchase (see the Limited Warranty terms in § 4 below), unless a longer minimum warranty period is mandated by applicable local laws. If the product shows any defects within the specified warranty period and that defect is not excluded under § 4, MUSIC Group shall, at its discretion, either replace or repair the product using suitable new or reconditioned product or parts. In case MUSIC Group decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e., one (1) year (or otherwise applicable minimum warranty period) from the date of purchase of the original product.

3 Upon validation of the warranty claim, the repaired or replacement product will be returned to the user freight prepaid by MUSIC Group.

4 Warranty claims other than those indicated above are expressly excluded.

PLEASE RETAIN YOUR SALES RECEIPT. IT IS YOUR PROOF OF PURCHASE COVERING YOUR LIMITED WARRANTY. THIS LIMITED WARRANTY IS VOID WITHOUT SUCH PROOF OF PURCHASE.

§ 2 Online registration

Please do remember to register your new BEHRINGER equipment right after your purchase at behringer.com under "Support" and kindly read the terms and conditions of our limited warranty carefully. Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently. Thank you for your cooperation!

§ 3 Return materials authorization

1 To obtain warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may contact the BEHRINGER distributor for your country listed under "Support" at behringer.com. If your country is not listed, please check if your problem can be dealt with by our "Online Support" which may also be found under "Support" at behringer.com. Alternatively, please submit an online warranty claim at behringer.com BEFORE returning the product. All inquiries must be accompanied by a description of the problem and the serial number of the product. After verifying the product's warranty eligibility with the original sales receipt, MUSIC Group will then issue a Return Materials Authorization ("RMA") number.

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[2] Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by MUSIC Group.

[3] Shipments without freight prepaid will not be accepted.

§ 4 Warranty Exclusions

[1] This limited warranty does not cover consumable parts including, but not limited to, fuses and batteries. Where applicable, MUSIC Group warrants the valves or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase.

[2] This limited warranty does not cover the product if it has been electronically or mechanically modified in any way. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. This limited warranty does not cover any such modification/adaptation, regardless of whether it was carried out properly or not. Under the terms of this limited warranty, MUSIC Group shall not be held responsible for any cost resulting from such a modification/adaptation.

[3] This limited warranty covers only the product hardware. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the product. Any such software is provided "AS IS" unless expressly provided for in any enclosed software limited warranty.

[4] This limited warranty is invalid if the factory-applied serial number has been altered or removed from the product.

[5] Free inspections and maintenance/repair work are expressly excluded from this limited warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, guitar strings, illuminants and similar parts.

[6] Damage/defects caused by the following conditions are not covered by this limited warranty:

- improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals;
- connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used;
- damage/defects caused by acts of God/Nature (accident, fire, flood, etc) or any other condition that is beyond the control of MUSIC Group.

[7] Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the limited warranty.

[8] If an inspection of the product by MUSIC Group shows that the defect in question is not covered by the limited warranty, the inspection costs are payable by the customer.

[9] Products which do not meet the terms of this limited warranty will be repaired exclusively at the buyer's expense. MUSIC Group or its authorized service center will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, MUSIC Group will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

[10] Authorized BEHRINGER dealers do not sell new products directly in online auctions. Purchases made through an online auction are on a "buyer beware" basis. Online auction confirmations or sales receipts are not accepted for warranty verification and MUSIC Group will not repair or replace any product purchased through an online auction.

§ 5 Warranty transferability

This limited warranty is extended exclusively to the original buyer (customer of authorized retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of MUSIC Group.

§ 6 Claim for damage

Subject only to the operation of mandatory applicable local laws, MUSIC Group shall have no liability to the buyer under this warranty for any consequential or indirect loss or damage of any kind. In no event shall the liability of MUSIC Group under this limited warranty exceed the invoiced value of the product.

§ 7 Limitation of liability

This limited warranty is the complete and exclusive warranty between you and MUSIC Group. It supersedes all other written or oral communications related to this product. MUSIC Group provides no other warranties for this product.

§ 8 Other warranty rights and national law

[1] This limited warranty does not exclude or limit the buyer's statutory rights as a consumer in any way.

[2] The limited warranty regulations mentioned herein are applicable unless they constitute an infringement of applicable mandatory local laws.

[3] This warranty does not detract from the seller's obligations in regard to any lack of conformity of the product and any hidden defect.

§ 9 Amendment

Warranty service conditions are subject to change without notice. For the latest warranty terms and conditions and additional information regarding MUSIC Group's limited warranty, please see complete details online at behringer.com.

* MUSIC Group Macao Commercial Offshore Limited of Rue de Pequim No. 202-A, Macau Finance Centre 9/J, Macau, including all MUSIC Group companies

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1. Before you get Started

1.1 Shipment

Your B212XL/B215XL was carefully packed at the assembly plant to assure secure transport. Should the condition of the cardboard box suggest that damage may have taken place, please inspect the unit immediately and look for physical indications of damage.

- **Damaged equipment should NEVER be sent directly to us. Please inform the dealer from whom you acquired the unit immediately as well as the transportation company from which you took delivery. Otherwise, all claims for replacement/repair may be rendered invalid.**
- **Please always use the original packaging to avoid damage due to storage or shipping.**
- **Never let unsupervised children play with the B212XL/B215XL or with its packaging.**
- **Please dispose of all packaging materials in an environmentally friendly fashion.**

1.2 Initial operation

Your B212XL/B215XL speakers are connected to a power amplifier using the speaker connectors located in the back. Please read ch. 4, “Additional Considerations” and ch. 5, “Application Examples” to get important technical information and practical suggestions about use.

This loudspeaker is capable of producing extreme volumes. Please keep in mind that high sound pressures do not only temporarily damage your sense of hearing, but can also cause permanent hearing damage. Be careful to select a suitable volume at all times.

1.3 Online registration

Please register your new BEHRINGER equipment right after your purchase by visiting http://behringer.com and read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, it is our intention to have it repaired as quickly as possible. To arrange for warranty service, please contact the BEHRINGER retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website (http://behringer.com).

Registering your purchase and equipment with us helps us process your repair claims more quickly and efficiently.

Thank you for your cooperation!

2. Connections

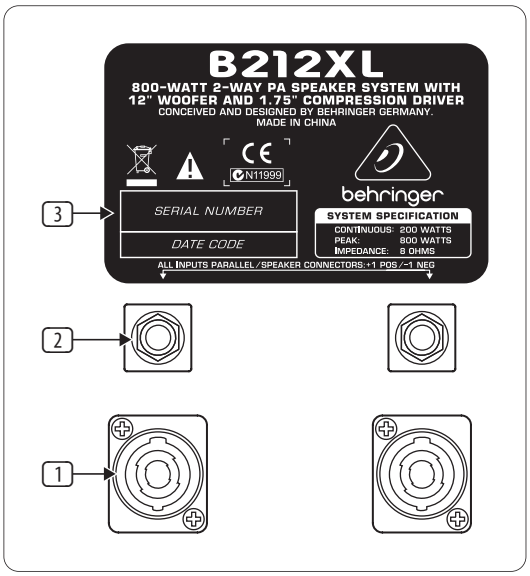

Fig. 2.1: Connections (B212XL and B215XL)

1 The B212XL/B215XL features two professional speaker 1 connectors which are wired in parallel. You can alternatively connect one of the connectors to the output on your power amp and tap into the signal from the amp once again on the second connector, in order, for example, to feed this signal into an additional loudspeaker. The pin designation of the speaker is pins 1+ and 1-.

- **ATTENTION: Never connect the output signals of different power amps to both parallel inputs at the same time. This may permanently damage your setup.**

2 The B212XL/B215XL includes 2, parallel ¼" loudspeaker 2 inputs. You can alternatively connect one of the connectors to the output on your power amp and tap into the signal from the amp once again on the second connector, in order, for example, to feed this signal into an additional loudspeaker.

- **When several loudspeakers are wired in parallel the overall impedance Z_T to be handled by the power amp can be calculated, as shown below, from the individual impedance values of the connected speakers:**

$$Z_T = \frac{1}{1/Z_1 + 1/Z_2 + \ldots}$$

- **Your amplifier may be damaged if the actual impedance drops below its input impedance. Please make sure that the calculated total impedance Z_T is not smaller than the minimum impedance specified for your amplifier.**

3 Serial number.

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3. Optimal Operation

We have developed the B212XL/B215XL for use in a wide range of possible applications. Of course, the sound of your loudspeakers depends on the acoustic characteristics of the room/space in which they are being used. The following chapters of this manual will give you information about getting the most out of your EUROLIVE speakers.

3.1 HF drivers

High frequencies are the segment of the audio spectrum responsible for clarity and speech intelligibility. These frequencies are the easiest ones to locate, but at the same time they are also the easiest ones to "obstruct". Therefore, we recommend positioning your speakers so that the HF drivers are located slightly above the height of the audience. This guarantees the best possible dispersion of high frequencies and considerably higher intelligibility.

3.2 How to prevent feedback

Always place the "front of house" speakers ahead of the microphones (from the audience's perspective), and never behind. Use professional floor monitors or an in-ear monitoring system to hear the stage performers.

3.3 How to avoid feedback when working with record players (DJ Applications)

In applications with record players, bass feedback can occur. Bass feedback occurs when low frequencies get back to the pickup and are reproduced on the speakers. The most common causes for this are: speakers located too closely to the record player, a room with a wooden floor, or presence of a podium or a platform. In such cases, it is best to move the speakers away from the record player and "banish" them from the stage, so that they are located on firm ground. Another option is to use raised stands, which prevent the speakers from having a direct contact with the ground.

3.4 Loudspeaker protection by using a low-cut filter

Try to prevent damage to your speakers caused by extreme oscillation of the bass membrane due to subsonic noise and extremely deep frequencies. Use an equalizer to cut off those frequencies that fall below your speakers' frequency range, or use a low-cut/high-pass filter. Most equalizers and sound-improvement systems offer a low-cut function, like the BEHRINGER ULTRAGRAPH DIGITAL DEQ1024, for example.

Using a low-cut filter in your signal path is particularly recommended if you use record players or CD players as your signal source. CD players often produce extremely deep frequencies, which can lead to extreme excursions of the bass membrane.

4. Additional Considerations

4.1 Length and diameter of loudspeaker cables

Loudspeaker cables whose diameter is too small can considerably limit the power amp performance. The longer the cable, the more pronounced the problem. As a result, musicians often simply "turn up" the amp, which can lead to loudspeaker damage. Therefore, don't use cables longer than 15 m (45 ft.). For most applications, this will not be necessary. Cable diameter should be at least 14 - 12 gauge.

4.2 Power amp rating

Selecting the right amp can turn out to be rather difficult. Therefore, stick to the following rule of thumb: the power rating of your amp should be roughly twice the speaker load capacity. A speaker rated at 200 Watts continuous performance can easily be powered by an amp rated at 400 Watts output power. An optimal addition to your speaker system would be the BEHRINGER EUROPOWER EP2000 power amp, for example.

4.3 Fuses

We do not recommend the use of fuses with audio applications. Damage to loudspeakers can be the result of high peak signals and high output power. However, fuses can only offer protection from one of these two factors, and never from both. Additionally, fuse resistors are sometimes nonlinear, leading to distortion and unpredictable overdriving.

4.3.1 Protecting your equipment

- Always try to find the optimal signal level. Try to avoid overdriving your amp.
- Keep in mind the physical limitations of your PA system.
- Use a limiter to restrict the output signal level. Place the limiter between the mixing console and the power amp. For this purpose, our proven AUTOCOM PRO-XL MDX1600, COMPOSER PRO-XL MDX2600 and MULTICOM PRO-XL MDX4600 compressors offer an outstanding solution. All models can be used as a limiter: the audio signal doesn't overdrive any more, and unpleasant "peaks" are effectively avoided.

◊ **Our ULTRADRIVE PRO DCX2496 and SUPER-X CX3400/ CX2310 crossovers are particularly well-suited for protecting your equipment: for each output, they have independent limiters.**

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5. Application Examples

5.1 Full-range stereo operation

In the following example, the main output signal of a mixing console is connected to a power amplifier. Both the outputs and inputs are stereo. A B212XL/B215XL is connected to each of the amp outputs, and these speakers reproduce the entire frequency range (a full range).

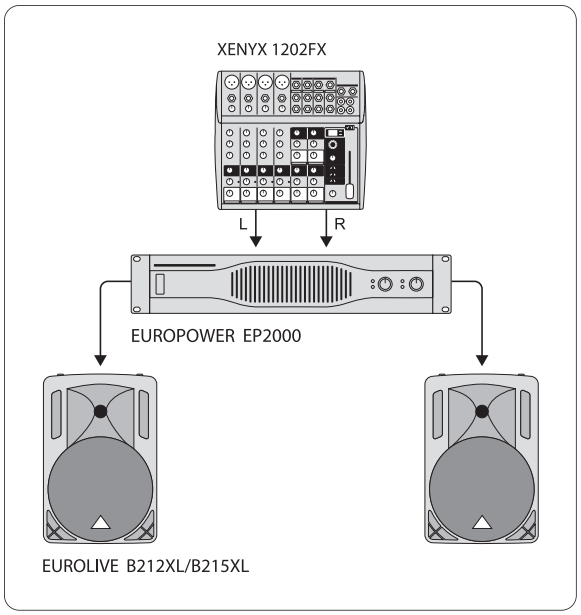

Fig. 5.1: Full-range stereo operation

5.2 Using several B212XL/B215XL loudspeakers

For larger rooms, you can connect several B212XL/B215XL speakers.

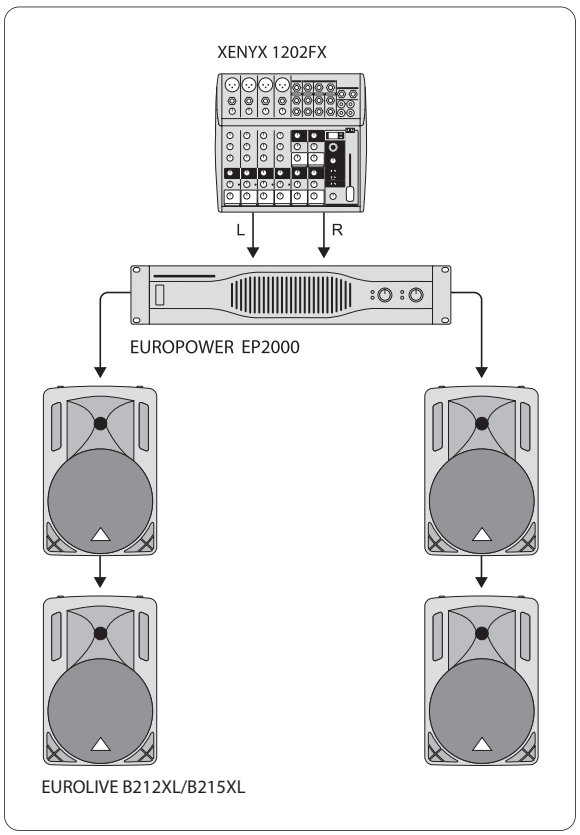

Fig. 5.2: Wiring several B212XL/B215XL loudspeakers

5.3 Stereo operation with a subwoofer

Using a crossover, the main output signal of a mixing console is split into a stereo signal and a mono signal. The mono signal covers the lower frequency range and the stereo signal covers all other frequency ranges. Then, the stereo signal is connected to a stereo power amplifier. A B212XL/B215XL is connected to each of the amp outputs. The mono subwoofer signal is connected to one channel of an additional power amplifier, which powers one EUROLIVE VP1800S subwoofer.

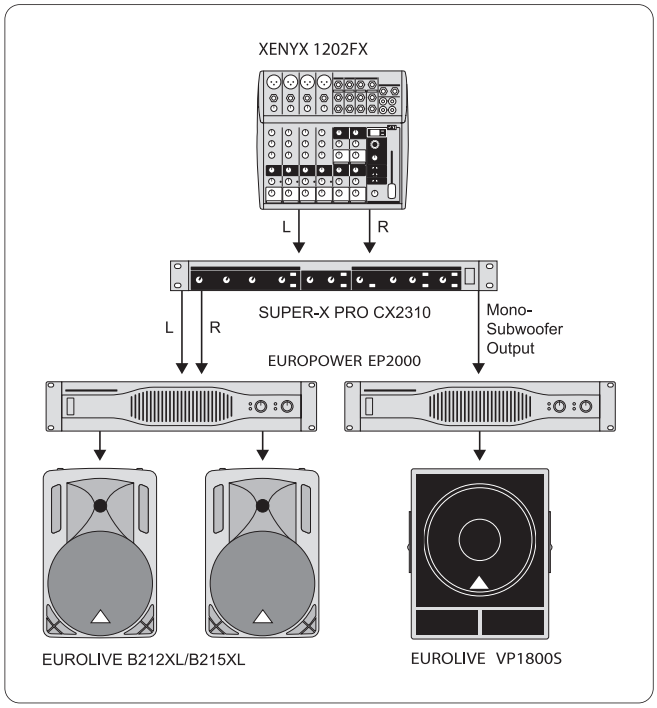

Fig. 5.3: Stereo operation with a subwoofer

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6. Installation

The EUROLIVE B212XL/B215XL features professional speaker connectors that assure problem-free operation. The connector was developed for loudspeakers with high power ratings. If it is connected into the corresponding plug, it locks into place and cannot accidentally be disconnected. It protects against electric shock and assures correct polarity. Each of the plugs only carries the assigned individual signal.

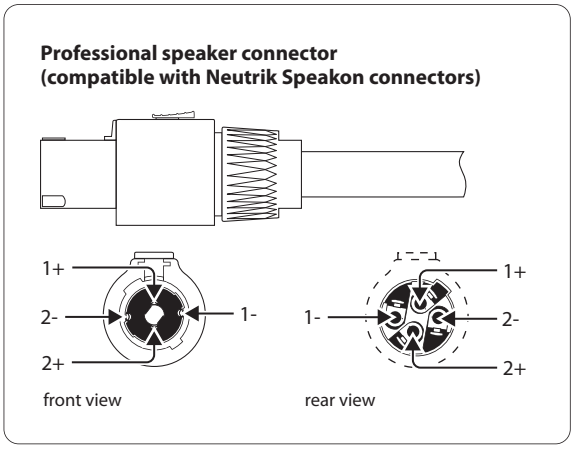

Fig. 6.1: Professional speaker connector

Please use only commercially available cables to connect your loudspeakers to the power amp. Verify the pin assignment of your loudspeakers and cables depending on the loudspeaker output you are using.

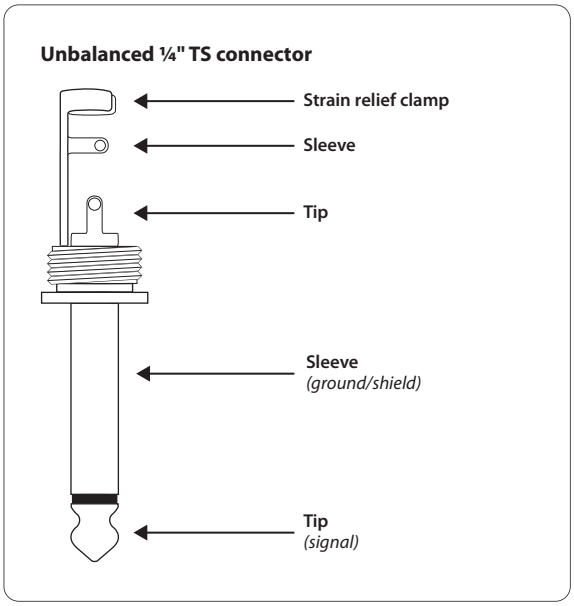

Fig. 6.2: ¼" TS connector

7. Specifications

System Data	
High-performance woofer	
B215XL:	15" (381 mm)
B212XL:	12" (305 mm)
Tweeter compression driver	
B215XL and B212XL:	1.75" (44 mm)
Frequency range	
B215XL:	55 Hz to 20 kHz
B212XL:	65 Hz to 18 kHz
Power rating	
B215XL:	1000 W Peak Power 250 W Continuous Power (IEC 60268-5)
B212XL:	800 W Peak Power 200 W Continuous Power (IEC 60268-5)
Impedance	
B215XL and B212XL:	8 Ω
Sensitivity (1 W @ 1 m)	
B215XL:	96 dB (Full Space)
B212XL:	95 dB (Full Space)
Dispersion	
B215XL:	70° x 40°
B212XL:	90° x 60°
Crossover frequency	
B215XL:	2.0 kHz
B212XL:	1.9 kHz

Dimensions/Weight	
Dimensions (H x W x D)	
B215XL:	approx. 27 ⅓ x 17 ⅓ x 13 1⁄16" approx. 695 x 440 x 335 mm
B212XL:	approx. 21 ⅔ x 13 ⅝ x 10 ⅝" approx. 550 x 345 x 270 mm
Weight	
B215XL:	38.7 lbs / 17.6 kg
B212XL:	24.0 lbs / 10.9 kg

BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

BEHRINGER
EUROLIVE B215XL/B215XL-WH/ B212XL/B212XL-WH

Responsible party name:	**MUSIC Group Services USA, Inc.**
Address:	**18912 North Creek Parkway, Suite 200 Bothell, WA 98011, USA**
Phone/Fax No.:	**Phone: +1 425 672 0816 Fax: +1 425 673 7647**

EUROLIVE B215XL/B215XL-WH/B212XL/B212XL-WH

complies with the FCC rules as mentioned in the following paragraph:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Important information:

Changes or modifications to the equipment not expressly approved by MUSIC Group can void the user's authority to use the equipment.

We Hear You

behringer